ENVIRONMENTAL CHEMISTS

Date of Report: June 11, 1996 Date Received: June 6, 1996

Project: Metro Self Monitor, PO M53554 Date Samples Extracted: June 7, 1996 Date Extracts Analyzed: June 11, 1996

RESULTS FROM THE ANALYSIS OF THE PROCESS WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC USING METHOD 6010

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	Zinc
M53554	0.31	0.29	0.24	< 0.05
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 69551 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicat Result	and the second s	Acceptance Criteria
Chromium	O UI /	0.31	0.27	14	0-20
Copper Nickel	mg/L (ppm) mg/L (ppm)	$0.29 \\ 0.24$	0.32 0.24	10 0	0-20 0-20
Zinc	mg/L (ppm)	< 0.05	0.06	nm	0-20

Laboratory Code: 69551 (Matrix Spike)

	Reporting	Spike	Sample	% I	Recovery	Acceptance	Relative Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	Difference
				La de Servicio			
Chromium	mg/L (ppm)	5	0.31	95	95	80-120	0
Copper	mg/L (ppm)	5	0.29	97	95	80-120	2
Nickel	mg/L (ppm)	10	0.24	95	94	80-120	1
Zinc	mg/L (ppm)	5	< 0.05	94	93	80-120	1

Laboratory Code: Spike Blank

	Reporting	Spike	% I	Recovery	Acceptance	Relative e Percent
Analyte:	Units	Level	MS	MSD	Criteria	Difference
Chromium	mg/L (ppm)	5	100	99	80-120	1
Copper	mg/L (ppm)	5	98	99	80-120	1
Nickel	mg/L (ppm)	10	99	97	80-120	2
Zinc	mg/L (ppm)	5	99	97	80-120	2

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

KNJ AI 6.6.96 1:55

SAMPLE CHAIN OF CUSTODY

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ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

June 11, 1996

INVOICE # 96ACU0611-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO M53554: Results of testing requested by Gerry Thompson, Project Manager for material submitted on June 6, 1996.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282

3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

June 11, 1996

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Scattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on June 6, 1996 from your Metro Self Monitor, PO M53554 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson

Chemist

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